

IFW #

PTO/SB/17 (12-04)

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Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL for FY 2005

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$180)

Complete if Known

Application Number	10/779,476
Filing Date	February 13, 2004
First Named Inventor	Lorenzo M. Leoni
Examiner Name	Yao, Lei
Art Unit	1645
Attorney Docket No.	076936-0307942

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☒ Deposit Account Deposit Account Number: 502212 Deposit Account Name: PILLSBURY WINTHROP SHAW PITTMAN LLP

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☒ Charge fee(s) indicated below ☒ Charge fee(s) indicated below, except for the filing fee

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FEE CALCULATION**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fee Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Small Entity	
	Fee (\$)	Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)** **Multiple Dependent Claims**

_____ - 20 or HP = _____ X _____ = _____ **Fee (\$)** **Fee Paid (\$)**

HP = highest number of total claims paid for, if greater than 20

Indep. Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)**

_____ - 3 or HP = _____ X _____ = _____

HP = highest number of independent claims paid for, if greater than 3

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets **Extra Sheets** **Number of each additional 50 or fraction thereof** **Fee (\$)** **Fee Paid (\$)**

_____ - 100 = _____ /50= _____ (round up to a whole number) x 125.00 = _____

4. OTHER FEE(S)

Non-English Specification, 130 fee (no small entity discount)

Other: IDS

Fee Paid (\$)

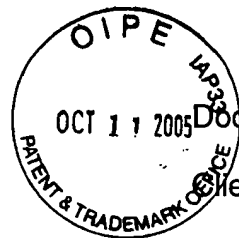
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SUBMITTED BY

Signature		Registration No. (Attorney/Agent)	51,116	Telephone	858509-4093
Name (Print/Type)	Donna Perdue	Date	October 6, 2005		

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Docket Number: 076936-0307942

PATENT APPLICATION

Patent Reference: 023.01 US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of

LORENZO M. LEONI

Group Art Unit: 1645

Application No.: 10/779,476

Examiner: Yao, Lei

Filed: February 13, 2004

Confirmation No.: 5542

For: COMPOSITIONS AND METHODS FOR THE DETECTION AND TREATMENT OF
METHYLTHIOADENOSINE PHOSPHORYLASE DEFICIENT CANCERS

SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom. Applicants respectfully request the Examiner return an initialed copy of the enclosed Form PTO-1449 to Applicants with the next Office communication to indicate that the reference(s) has been considered, per MPEP § 609.

This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance.

Please charge Deposit Account 502212 in the amount of \$180.00 in payment of the fee under 37 CFR 1.17(p). Please credit or debit Deposit Account 502212 as needed to ensure consideration of the disclosed information.

10/12/2005 HLE333 00000002 502212 10779476

01 FC:1806 180.00 DA



Respectfully Submitted,

Donna O. Perdue

Registration Number 51,116

Customer Number: 27500

Date: October 6, 2005
PILLSBURY WINTHROP SHAW PITTMAN LLP
Telephone: (619) 234-5000
Facsimile: (858) 509-4010
11682 El Camino Real
Suite 200
San Diego, CA 92130-2092

CERTIFICATION UNDER 37 C.F.R. §§ 1.8 and/or 1.10*

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I hereby certify that, on the date shown below, this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

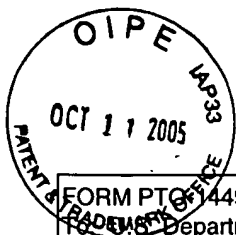
Date: October 6, 2005

Signature

PATRICIA MUNOZ

(type or print name of person certifying)

* Only the date of filing (§ 1.6) will be the date used in a patent term adjustment calculation, although the date on any certificate of mailing or transmission under § 1.8 continues to be taken into account in determining timeliness. See § 1.703(f). Consider "Express Mail Post Office to Addressee" (§ 1.10) or facsimile transmission (§ 1.6(d)) for the reply to be accorded the earliest possible filing date for patent term adjustment calculations.



FORM PTO 1449 (modified)
 U.S. Department of Commerce
 (PW FORM PAT-1449)
 Patent and Trademark Office

Atty. Dkt. No.	M#	Client Ref.
	076936-0307942	023.01 US

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Applicant: Lorenzo M. Leoni	
Appln. No.: 10/779,476	
Filing Date: February 13, 2004	
Examiner: Yao, Lei	Group Art Unit: 1645

Date: October 6, 2005

Page 1 Of 2

U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR 4,366,241	12/1982	Tom et al.	435	7	
	BR 4,376,110	03/1983	David et al.	436	513	
	CR 4,517,288	05/1985	Giegel et al.	435	7	
	DR 4,837,168	06/1989	de Jaeger, et al.			
	ER 5,840,505	11/1998	Carrera et al.	435	18	
	FR 5,942,393	08/1999	Nobori et al.	435	6	
	GR 6,210,917	04/2001	Carson et al.	435	18	
	HR 6,214,571	04/2001	Carrera et al.	435	18	

FOREIGN PATENT DOCUMENTS

	Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
					Enclosed	No	Enclose	No
	IR WO 99/67634	12/1999	PCT	Carson, et al.				
	JR							
	KR							

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

LR	Cairns, P, et al., Frequency of homozygous deletion at p16/CDKN2 in primary human tumours, <i>Nature Genetics</i> , 11:210-12 (1995)			
MR	Carrera, C.J., et al., Toxicity of L-alanosine to MTAP-deficient cells: Selective treatment strategy for cancer with CDKN2 deletion, <i>Proceedings of the American Association for Cancer Research</i> , Volume 37, Abstract No. 2775 (1996).			
NR	Chen, Z.H., et al., Expression of methylthioadenosine phosphorylase cDNA in p16, MTAP malignant cells: restoration of methylthioadenosine phosphorylase-dependent salvage pathways and alterations of sensitivity to inhibitors of purine de novo synthesis, <i>Molecular Pharmacology</i> , 52:903-911 (1997)			
OR	Christopher, S.A., et al., Methylthioadenosine phosphorylase, a gene frequently codeleted with p16cdkN2a/ARF, acts as a tumor suppressor in a breast cancer cell line, <i>Cancer Research</i> , 62:6639-6644 (2002)			
PR	Efferth, T., et al., Methylthioadenosine phosphorylase as target to chemoselective treatment of T-cell acute lymphoblastic leukemic cells, <i>Blood Cells, Molecules and Disease</i> , 28(1):47-56 (2002)			
QR	Fitchen, J.H., et al., Methylthioadenosine phosphorylase deficiency in human leukemias and solid tumors, <i>Cancer Research</i> , 46:5409-5412 (1986)			

	RR	Hannon, G.J., et al., p15/ <i>INK4B</i> is a potential effector of TGF- β -induced cell cycle arrest, <i>Nature</i> , 371:257-261 (1994)				
	SR	Harasawa, H., et al., Chemotherapy targeting methylthioadenosine phosphorylase (MTAP) deficiency in adult T cell leukemia (ATL), <i>Leukemia</i> , 16:1799-1807 (2002)				
	TR	von Heyningen, V., Ranking antibody affinities, <i>Methods in Enzymology</i> , 121:472-481 (1986)				
	UR	Houghten, R.A., General method for the rapid solid-phase synthesis of large numbers of peptides: Specificity of antigen-antibody interaction at the level of individual amino acids, <i>Proc. Natl. Acad. Sci. USA</i> , 82(15):5131-5135 (1985)				
	VR	Handbook of Immunochemical Staining Methods, 3 rd Edition, T. Boenisch, ed., DAKO Corporation, Carpinteria, California, 2001, 68 pages, available at: http://www.ihe.com/books/dako_handbook.pdf				
	WR	Kamatani, N., et al., Selective killing of human malignant cell lines deficient in methylthioadenosine phosphorylase, a purine metabolic enzyme, <i>Proc. Natl. Acad. Sci. USA</i> , 78(2):1219-1223 (1981)				
	XR	Kamb, A., et al., A cell cycle regulator potentially involved in genesis of many tumor types, <i>Science</i> , 264(5157):436-440 (1994)				
	YR	Köhler, G., et al., Continuous cultures of fused cells secreting antibody of predefined specificity, <i>Nature</i> , 256:495-497 (1975)				
	ZR	Köhler, G., et al., Derivation of specific antibody-producing tissue culture and tumor lines by cell fusion, <i>Eur. J. Immunol.</i> 6:511-519 (1976)				
	AAR	Nobori, T., et al., Deletions of the cyclin-dependent kinase-4 inhibitor gene in multiple human cancers, <i>Nature</i> 368:753-756 (1994)				
	BBR	Nobori, T., et al., Methylthioadenosine phosphorylase deficiency in human non-small cell lung cancers, <i>Cancer Research</i> , 53:1098-1101 (1993)				
	CCR	Olopade, O.I., et al., Construction of a 2.8-megabase yeast artificial chromosome contig and cloning of the human methylthioadenosine phosphorylase gene from the tumor suppressor region on 9p21, <i>Proc. Natl. Acad. Sci. USA</i> , 92:6489-6493 (1995)				
	DDR	Qiu, X., et al., Identification and characterization of a C(K/R)TC motif as a common epitope present in all subtypes of hepatitis B surface antigen, <i>J. Immunol.</i> , 156:3350-3356 (1996)				
	EER	Ragione, F.D., et al., Purification and characterization of recombinant human 5'-methylthioadenosine phosphorylase: Definite identification of coding cDNA, <i>Biochemical and Biophysical Research Communications</i> , 223:514-519 (1996)				
	FFR	Schofield, K., et al., The cell adhesion molecule, E-cadherin, distinguishes mesothelial cells from carcinoma cells in fluids, <i>Cancer (Cancer Cytopathology)</i> 81(5):293-298 (1997)				
	GGR	Toohy, J.I., et al., Methylthio group cleavage from methylthioadenosine. Description of an enzyme and its relationship to the methylthio requirement of certain cells in culture, <i>Biochemical and Biophysical Research Communications</i> , 78(4):1273-1280 (1977)				

Examiner	Date Considered:
<p>*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.</p>	